Copy Sent HL.S.G.

26/10.

TOP SECRET

TICOM/1-149

REPORT BY UFFZ KARRENBERG AND

COLLEAGUES ON ALLIED

CYPHER MACHINES

Attached is a translation of a report on Allied Machine cyphers by Uffz. KARRENBERG and his colleagues, of OKH, Gen. der N.A., Gruppe VI, written at our request at CSDIC (UK) in October, 1945.

TICOM

20th October, 1945 No. of pages:

DISTRIBUTION

British:

D.D.3.

H.C.G.

D.D. (N.S.)

D.D. (M.W.)

D.D. (A.S.)

C.C.R.

Lt. Col. Leathem

Cdr. Tandy

Major Morgan

U.S.

Op-20-G (2) (via Lt.Gdr.Manson) G-2 (via Lt.Col. Hilles)

A.S.A. (3) (via Major Seaman) Director, S.I.D. USFET (via Lt. Col. Johnson) Col. Lewis Powell, USSTAF.

TICOM

Chairman S.A.C. (3)

Cdr. Bacon

Lt. Col. Johnson

Major Seaman

Lt. Cdr. Manson

Major Cowan

Lt. Fehl

Ticom Files (4)

Additional

Mr. Twinn

The ((following)) British and U.S. traffic was intercepted by Group VI of Receiving Station ((Empfangsstelle)) West:

- 1) U.S. FF5 traffic
- 2) U.S. WT-FF5 traffic
- 3) High speed MORSE (Press reports by war correspondents).

British FF5 links were presumably also monitored, but we do not know any details as to which traffic it was. The U.S. (?) FF5 "Tapeworm" (machine cypher) which came up was intercepted on a punched strip. As far as we know, the traffic always consisted of short messages which were passed to Group IV to be worked on.

The machine system referred to was worked on by Uffz. LACHNER in Section 1b (Baurat PIETSCH). Section 1b also worked on British and U.S. systems. No details are known.

A cryptanalytic party, numbering about 20 men, under Wm. ENGELHARDT, also worked with Senior Signals Recce Commander Oberst KOPP. The ENGELHARDT party worked on British and U.S. systems, using, among other things, an electrically driven apparatus constructed by themselves. (This was a heavy, black-painted metal box, measuring approximately 50 x 50 x 40 cm, composed of two parts of about equal size. In front of the machine was a keyboard, like a teleprinter. The machine was fitted in the upper part with a set of indicating lamps; when a key was depressed, a letter was illuminated above, as on the German cypher machine). The construction and function of this apparatus, and the systems with which it dealt, are unknown to us. It is alleged that complete solutions (not breaks-in) were achieved by means of this machine.

Commanding Signals Recce Forces, PIETSCH's section was seconded to Oberst KOPP, and worked there in collaboration with the ENGELHARDT party. The PIETSCH section worked on French, British and U.S. machine systems, using the ENIGMA ((sic)). When the Senior Signals Recce Commander had to retreat, PIETSCH's section and the ENGELHARDT party were sent to BAD REICHENHALL. From there, owing to lack of space, PIETSCH's and MARQUARDT's sections and the ENGELHARDT party were moved to UNKEN near REICHENHALL. There, the ENGELHARDT party was subordinated to MARQUARDT's section. It was here that I saw Wm. ENGELHARDT for the last time, in the middle of April. The cypher machine was also taken to UNKEN.